

Notice of Allowability

Application No.

10/816,979

Examiner

VanThu Nguyen

Applicant(s)

LEE ET AL.

Art Unit

2824

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to paper filed on 10/28/05 & phone conversation w/ Hosoon Lee on 11/03/05.
2. ☒ The allowed claim(s) is/are 1-30.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 04/02/2004
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment _____
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

VanThu Nguyen
Primary Examiner
Art Unit: 2824

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Hosoon Lee on November 3, 2005.

The application has been amended as follows:

Cancel claims 31-39.

2. Claims 1-30 are allowed.

According to specification, column address is 4N-aligned when lower bits of the column address signals A1A0 are "00" and the first sense amplifier group of plurality of sense amplifier groups is first to be output, follows with second, third, fourth sense amplifier groups.

Confalonieri et al. (U.S. Patent No. 6,958,949) disclose, in FIG. 3A, a memory array having a plurality of sense amplifier groups SA0-SA7 using in burst mode, each group having a plurality of sense amplifiers; three layers of column selection circuits connected to plurality of bit lines/global bit lines. However, Confalonieri et al. is silent about those bit lines/global bit lines being selected according to 4N-aligned column address.

Balluchi (U.S. Patent No. 6,507,534) discloses, in FIG. 2, a memory array having a plurality of sense amplifier groups 14 using in burst mode; two layers column selection circuits S1 and S2 connected to a plurality of bit lines/global bit lines. However, Balluchi is also silent about those bit lines/global bit lines being selected according to 4N-aligned column address.

Therefore, Examiner's statement of reasons for allowance is as follows:

The prior art made of record and considered pertinent to the applicant's disclosure does not teach or suggest the claimed limitations. Confalonieri et al. and Balluchi, taken individually or in combination, do not teach the claimed invention having limitation of the column selection circuit being configured to select the columns determined by whether the column address is 4N-aligned, in combination with the remaining claimed limitations.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VanThu Nguyen whose telephone number is (571) 272-1881. The examiner can normally be reached on Monday-Friday, 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Elms can be reached on (571) 272-1869. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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November 3, 2005

A handwritten signature in black ink, appearing to read "VanThu Nguyen". The signature is fluid and cursive, with a long horizontal stroke at the beginning and a sharp upward curve at the end.

VanThu Nguyen
Primary Examiner
Art Unit 2824